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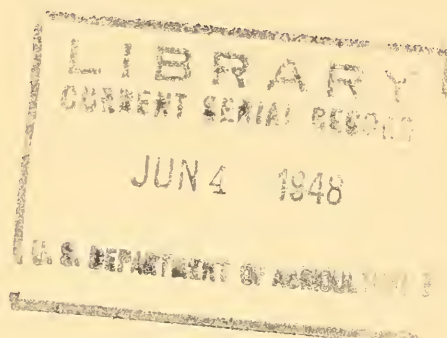


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United States Department of Agriculture  
Agricultural Research Administration  
Bureau of Animal Industry

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REPORT ON DEVELOPMENTS  
IN THE  
CAMPAIGN AGAINST FOOT-AND-MOUTH  
DISEASE IN MEXICO



NOTE: This report has been prepared on the basis of the best information obtainable at the time of compilation but is subject to later revision. The first report in this series was prepared January 28, 1947, and was followed by 11 supplements, the last of which appeared January 29, 1948. The series of supplements was discontinued in March but separate reports, similar to this one, on developments in the campaign will continue to be issued.



### Principal Recent Developments in Campaign

Significant developments in the campaign against foot-and-mouth disease in Mexico since the issuance of the last report in this series, March 18, are summarized in the following brief accounts. Several additional items deal with related subjects involving protection of the United States.

#### Portion of Northern Quarantine Line Again Moved Southward

Late in April a sector of the northern quarantine line maintained across Mexico was moved farther southward. The action taken is the second of its kind in about 8 weeks.

The portion of the line moved is in the vicinity of San Luis Potosi, and the area thus freed of quarantine restrictions is reported by the joint Mexican-United States Commission to exceed 3,000 square miles. The action was preceded by herd inspections, made by commission veterinarians and technicians covering more than 50,000 square miles. These inspections showed that the change in the line could be made with ample safety.

#### Nearest Infection 328 Miles from U. S. Border

In view of various estimates that have been made of the nearest approach of foot-and-mouth disease in Mexico to the United States, officials of the joint Mexican-United States Commission in Mexico authorize the statement that the distance, late in April, was 328 miles. This represents the distance from the nearest known place of infection in Mexico to the nearest point on the U. S. border. The foot-and-mouth disease quarantine line in Mexico is considerably closer--250 miles from the United States. Thus as a safety measure there is a gap of 78 miles at that point that the disease must traverse before it gets to the quarantine



line. These distances are near the Gulf coast where Texas has its southernmost point. Farther west along the quarantine line the distances to the United States are much greater.

Legislation Authorizes Long-Range Research

Legislation enacted by Congress and approved by President Truman April 24 authorized the Secretary of Agriculture to conduct research on foot-and-mouth disease.

Under this legislation (Public Law 496--80th Congress) the Secretary of Agriculture is authorized to establish research laboratories, including the acquisition of necessary land, buildings, or facilities and also the making of research contracts as provided by previous research legislation. The new act authorizes, under specified safeguards, "research and study, in the United States or elsewhere, of foot-and-mouth disease and other animal diseases which in the opinion of the Secretary constitute a threat to the livestock industry of the United States." One of the safeguards is "that no live virus of foot-and-mouth disease may be introduced for any purpose into any part of the mainland of the United States except coastal islands separated therefrom by waters navigable for deep-water navigation and which shall not be connected with the mainland by any tunnel." However, in the event of an outbreak of foot-and-mouth disease in this country, "the Secretary of Agriculture may, at his discretion, permit said virus to be brought into the United States under adequate safeguards."

The legislation thus enables the Department to proceed with its plans for fundamental long-range studies of foot-and-mouth disease under the limitations mentioned. The act constitutes what is known as enabling legislation. This is logically to be followed by careful official

estimates, for consideration by Congress, of the cost of necessary buildings and facilities. The amount will depend to a considerable extent on the site selected. Several locations are under consideration but the selection has not yet been made.

#### Slaughter Operation in Northern Buffer Zone

Reports from Mexico show that during March only one small outbreak of foot-and-mouth disease occurred in the buffer zone, established to protect the northern quarantine line. That outbreak was near the town of Huexco in the State of San Luis Potosi and involved 28 cattle and 4 hogs. Commission technicians slaughtered and buried these animals on March 21 and disinfected the premises shortly afterward.

The present program of combating foot-and-mouth disease in Mexico permits the immediate slaughter and burial of infected and exposed animals found in the buffer zones. The foregoing incident represents such an eradication operation to prevent breach of the quarantine line.

#### Progress in Fence Construction

Construction is progressing on a previously authorized section of fence between Tamiahua on the Gulf and Tamazunchale in the State of San Luis Potosi. This location is within the northern buffer zone at its eastern end, and the purpose is to create a barrier that will help protect the northern quarantine line which is north of the fence. This area is heavily traveled.

Right of way has been established for the entire 120 miles of fence between the towns mentioned. Much of the heavy clearing work on the eastern end of this line has been completed and similar work has been begun on the western end. This is being accomplished by heavy



tractor-bulldozer equipment. Power-driven post-hole digging machines are being used on the job, following closely behind the clearing operations. Fence construction follows these operations as rapidly as delivery of posts and wire permits. Approximately 20 miles of fence has been completed.

#### Extensive Use of Vaccine

As a part of the current plan of combating foot-and-mouth disease in Mexico, immunizing vaccine is being applied to healthy susceptible animals in strategic localities which are largely just south of the northern quarantine line. The purpose is to reinforce that line by creating a zone in which the resistance of the susceptible animals has been raised by preventive vaccinations. The period of protection, by the use of the vaccine, is approximately six months.

Because the supply of vaccine is still limited, the commission has selected, for initial applications, areas in greatest need of this protection. Such areas are (1) near the Nayarit-Jalisco State line near the town of Ixtlan del Rio and (2) northern parts of the State of Veracruz near Cerro Azul. More than 100,000 doses of vaccine have now been used in Mexico. Most of the vaccines administered thus far were from The Netherlands and Argentina. Vaccines made from Mexican virus are now on their way from Europe to Mexico. Three United States technicians in Europe participated in their production and testing.

#### Slaughter Operations Help Sustain Southeastern Quarantine Line

Within the buffer zone between the quarantine and protective lines in southeastern Mexico, seven communities (municipios) were reported at the end of March to have contained the infection of foot-and-mouth disease. During that month approximately 4,379 infected or exposed



animals had been slaughtered and buried in that area. Some opposition was encountered but that has been largely overcome by intensive educational efforts together with the presence of military forces.

U. S. Employee Fatally Shot

Juan H. Lopez, a United States livestock inspector, was shot on March 26 while traveling up the Coatzacoalcas River on an educational mission to explain to cattlemen measures for suppressing foot-and-mouth disease and to obtain their cooperation. He died from his wounds in a hospital in Minatitlan on the following day. On March 31 investigators of the commission announced that two men had confessed to the shooting. They denied any enmity against the campaign or the slain man and blamed their act on their intoxicated condition. The case of the two men is pending before a local court of jurisdiction. The investigators were aided by the United States Embassy and local, State, and national authorities, including the Mexican Army. The fatal shooting resulted in a re-examination of the problem of personal safety of employees engaged in the campaign.

Though a naturalized United States citizen, Mr. Lopez was of Mexican ancestry, had no enemies, spoke Spanish fluently, and being engaged in purely educational work had declined a military escort that had been offered, in fact, urged. He had reasoned that the success of his effort to inform the people regarding the campaign and to obtain their cooperation would be impaired by the presence of a military guard. After his death, the U. S. section of the commission again sought the views of its district supervisors on the safety of employees, which had been discussed on numerous previous occasions.

The reactions were varied. Points in support of military escorts

were that they are essential for the protection of human life, for guarding property, and for overcoming opposition should any exist.

Reasons for not wanting military escorts were that the presence of soldiers implies coercion and causes resentment among livestock owners who voluntarily cooperate in the campaign, that a small escort is of slight value in cases of serious resistance, and that a large escort almost always moves slowly, thereby reducing the number of premises an inspector can visit and otherwise retarding the work.

District supervisors pointed out, also, the varying degrees of public understanding and support of the campaign in different areas.

The present policy is that, if the military authority of the area and the district supervisors agree that military escort is unnecessary, then field parties will make inspections unescorted. No field trips without military protection are to be made if district supervisors decide that the safety of personnel requires military escort even though the military commander considers the escort unnecessary.

#### Disinfection Activities Summarized

Besides regular disinfection work conducted at stations established along the northern and southeastern quarantine lines, such operations frequently extend to other fields of activity. These included, during one month, the disinfection of: 38 airplanes at Mexico City and more than 240 planes at Acapulco; 16 cargo boats at the port of Veracruz, 154 at Tuxpan, and 22 at Acapulco; 191 railroad cars in 6 localities. All these operations are aimed, of course, at preventing the disease from spreading beyond the limits of the infected central area.

#### Testing and Use of Vaccine

To make certain that the vaccine used in the campaign will reach the field with its effectiveness undiminished, the commission has made

arrangements for its testing and for the constant maintenance of the required low temperature range. So-called safety testing is conducted at a station in the outskirts of Mexico City, and all vaccine is so tested before its release for field use. As the name indicates, this test is conducted to make sure that the vaccine is incapable of causing the disease.

At a second station now under construction, vaccine will be tested for its protective ability. In this test, commission technicians will first inoculate animals with the vaccine, allow ample time for immunization to become effective, and then expose the animals to the Mexican virus. By the inclusion of a group of susceptible animals as controls, this test will indicate the degree of protection provided.

In the use of vaccine the cooperation of stock owners has, in general, been good. But some have demurred through fear that the vaccine may be a means of infecting their animals. Others have hesitated on the grounds that the United States has not used vaccine in past outbreaks and they, therefore, question the value of vaccine. This reason is somewhat ironical since other Mexican stockmen, during the period of general slaughter of affected animals, opposed the slaughter policy on the grounds it was not trustworthy because it was a "gringo" method.

The foregoing attitudes are being counteracted by various informational measures, including personal contacts, through which the essential facts are presented.

#### Classification of Commission Personnel

At the end of March the staff of civilian workers engaged in the campaign against foot-and-mouth disease in Mexico totaled 2,181 persons.



Of these, 510 were employed by the United States section of the commission, 213 by the Mexican section, and 1,458 by the joint commission. The first two groups are composed principally of technical and other specialized employees whereas the last group comprises laborers and other unskilled workers.

The employees of the United States section included, at the end of March, 82 veterinarians, 93 livestock inspectors, 109 sanitary technicians, 20 paymasters, 18 appraisers, 139 administrative and clerical workers, together with groups assigned to wild-life studies, fence construction, and other specialized duties. The Mexican section included 68 veterinarians, 15 sanitary technicians, 19 appraisers, 5 paymasters, and 106 employees in the executive offices.

#### Transportation Difficulties

With thousands of premises to visit and vast numbers of animals to inspect or vaccinate, the field staffs of the commission require, for their greatest effectiveness, rapid means of transportation. An inspector who can travel in a motor car can cover much more territory than one on horseback or afoot. This means that in areas of difficult accessibility either there must be more inspectors or travel conditions must be improved. Mexico has many miles of excellent roads yet some extensive areas can be reached only over unimproved roads or trails. Fortunately the commission has many jeeps and these have been indispensable under adverse travel conditions.

In some of the remote regions, the construction of "jeep trails" by the commission's engineers has greatly expedited inspection work. Using several tractor-bulldozers, the engineers can complete several miles of



road in a day. Similarly, the powerful bulldozers have aided fence construction, as a part of the control campaign, by building "truck trails" through jungle country for the transportation of construction materials and personnel. The first section of fence will be at least 90 miles long.

Though these engineering services are of great aid, it must be remembered that Mexico is a large country having much difficult terrain. The task of building even low-standard roads fast enough to keep up with activities necessary to control an elusive disease is accordingly a herculean task.

#### Canned Meat Purchases

The U. S. Department of Agriculture has continued its efforts to help cattlemen in northern Mexico find an outlet for their surplus stock, which quarantine measures now exclude from the United States. By the end of March, arrangements had been completed for the sale, for export, of all the Mexican canned meat delivered up to that time.

Total deliveries for the period from August 1947 through March 1948 were about 22,000,000 pounds. Slaughtering and canning operations began during March at one new plant, at Magdalena, Sonora, and continued at four other plants.

#### International Border Patrol

Officials who direct patrol activities on the Mexican-United States border reported a marked increase, during March, in the number of animals that entered the United States illegally. The number was 147, which is about three times as many as in recent previous months. The animals included cattle, sheep, swine, and goats. The increase is attributed chiefly to drought conditions in northern Mexico. Apparently more animals than usual

sought the water of the Rio Grande River and then continued across. One instance of smuggling was detected. All the animals that entered the United States illegally were killed and their carcasses either buried or burned.